

Claim ~~15~~<sup>15</sup> (Amended) The applicator and adhesive transfer device of Claim [15] ~~11~~<sup>11</sup> wherein said [rolls includes a generally cylindrical] core [having] has an end plate engaging the opposite ends of said core with projection means engageable in said mounting means and further including means for applying a predetermined force biasing said end plate into engagement with the ends of said roll core.

Claim ~~18~~<sup>18</sup> (Amended) The applicator and adhesive transfer device of Claim ~~11~~<sup>10</sup> wherein the axis of said second nip roller is horizontally displaced from the axis of said second nip roller.

#### REMARKS

The Office Action has been reviewed. At the outset, a review of the Applicants' invention is believed helpful in resolving prosecution issues. The Applicants' invention is a multi-purpose laminating and adhesive transfer device which is a "cold" device and does not require heating of the materials to be applied. The device has a frame with mounting means which receives a first roll of material such as laminate or a film coated with a releasable adhesive. A first nip roller extends transversely across a frame.

An upper frame section is secured to the base frame. The upper frame member has means for mounting or securing a second roll of material such as a laminating film, paper or other material which has an affinity for adhesive. A second nip roller extends transversely across the upper frame and when the upper frame member is positioned in an operative position, the nip rollers engage or are closely adjacent one another. An actuator,

which may be a motor or which may be a manually operable hand crank, is provided for driving and rotating at least one of the nip rollers. In one embodiment, the upper frame member may be pivoted to an open position to separate the nip rollers to facilitate loading of material. Alternately, at least one of the nip rollers may be mounted in a slidable gibb  
5 plate.

The upper and lower rolls, about which the laminating materials or adhesive transfer materials are wound, have integrally formed tensioning means so that the appropriate tension for paying out the materials may be established by the manufacturer. The tensioning means includes the end caps which bear against the roll core and which can be  
10 adjusted to prevent the rollers from overrunning and to provide the proper cast and prevent curling.

Feed trays are attachable to either the base or upper frame member for feeding the master to be processed such as a document which is to be laminated. By way of example, the lower feed roll may be a flexible film with an adhesive and the upper feed roll may  
15 comprise a supply of film which has an affinity for adhesive. A preprinted master such as a master consisting of labels is repetitively printed on a strip and can be fed across the feed tray to the interface between the nip rollers. The adhesive will be transferred from the bottom web to the labels with excess label being picked up by the material from the upper feed roll. The processed labels now have an adhesive surface and may be severed at a  
20 cutting edge provided at the rear of the device.

Claims 1 and 11 are the independent Claims presently under consideration by the Examiner. Both Claim 1 and Claim 11 have been amended to more particularly point out

and amplify the unique features of the Applicants' invention and now emphasize the construction of the feed rolls which have integral tensioning means which allow the tension to be pre-set to provide the proper operation depending upon the type of material, size of the material, thickness of the material and other factors.

5           Claims 1 to 4, 8 to 14 and 17 have been rejected under 35 U.S.C. §103 as being unpatentable over Brink in view of Dresser. Claims 1 and 11, as amended herewith, both set forth with specificity the pre-tensioning construction of the feed rolls. The structure formerly recited in Claim 7 has been incorporated into Claim 1. Similarly, Claim 14 has been incorporated into Claim 11.

10           It is respectfully submitted that none of the references, either singularly or in combination, suggest a laminating or adhesive transfer device of the construction described and having rollers for feed material which can be pre-tensioned.

          The Brink patent discloses an apparatus for laminating articles which has two pressing rollers mounted in a frame. The pressing rollers have to be heated as the device  
15   is a hot-melt machine in contrast to Applicants' device which is a "cold" device. Because the Brink device is a heated machine, it is necessary at times to separate or lift the films being applied from the pressing rollers so that during the time the pressing rollers are being heated they can rotate without film being carried along.

          The Dresser patent also relates to a laminator of the type which requires that the  
20   material be heated to cause proper bonding of the laminating materials. The Examiner is correct in stating that the Dresser device comprises supply rolls 30 and 36 mounted to the frame by means of arms 18, 20, 38 and 40 and journal portions 26, 42 and 44 with slots.

The lamination device of Dresser also includes a feed tray for facilitating feed of individual articles to laminating rollers.

Claims 1 and 14 as presented are believed to be clearly patentable over the Dresser and Brink references. While it is true that these devices show basic lamination machines of the type which require heating and having dual feed rolls or supply rolls which feed material such as plastic through platens or rollers, the reference patents neither singularly or in combination contain any suggestion of means for pre-tensioning the supply rolls to avoid overrunning and to insure that proper alignment of the supply material occurs and that a clean lamination results. Tensioning is not as critical a problem with heated devices since fusing occurs aided by heating of the material. Applicants' device is a cold device and accordingly proper tensioning is very critical. If tension of the feed material is not properly controlled, unacceptable lamination will result. For example, rippling and curling may occur or the two materials will tend to run out of line (cast).

To solve this problem, the Applicants have provided integral tensioning means within the core of the feed roll associated with the mounting means. Thus, the tension, that is the resistance of the rotation of the feed roll, can be controlled and can be pre-set by the manufacturer or supplier in accordance with the type and thickness of the material and the process requirements.

Levitan has been cited by the Examiner as disclosing a laminating machine comprising supply rolls 24 and 26 for supplying films to heated pressure rollers. Tension adjusting assemblies 28 are employed to provide wrinkle-free lamination.

Levitan does show a laminating machine including a pair of cooperating heater roller assemblies and a pair of pull rolls. The supply rolls of film are each supported on a pair of cross rods and the laminating machine and tensioning brake means are associated with each supply roll to assure maintenance of proper tension in the film. However, the tensioning device of Levitan is structurally dissimilar from Applicants and is not in any way suggestive of Applicants' integral tensioning device. The tensioning device of Levitan is an external device which has a pressure pad that bears against the end face of the supply roll. The pressure pad is carried on a leaf spring that is cantilevered from a hub which is adjustably carried on a cross member rod of the machine and is adapted to be retained in the selected adjusted position by thumb screws. Adjustment of the relative position of the cooperating pairs of tensioned adjusting means allows the user to accommodate supply rolls of film of different widths and to establish the desired tension.

Thus, with the tensioning means of Levitan, the operator or user must select the proper tension by adjusting the position of the pressure pad by sliding it along the cross bars.

To the contrary, with the Applicants' device, the core of the rolls and the mounting means are cooperatively engaged and a pre-set resistance can be established by the manufacturer or supplier. With Applicants' device, adjustment of critical tensioning is not required to be done by the operator. Rather, it can be done at the factory under carefully controlled conditions.

Thus, if the combination of Bring, Dresser and Levitan were made, the result would be basically the device of Levitan or the device of one of the other two reference patents

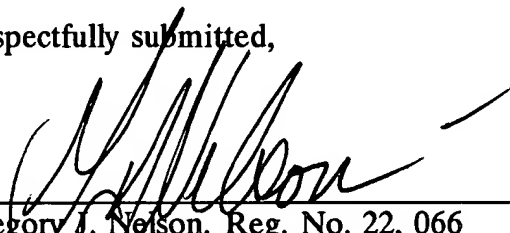
with external tensioning adjustment means. No suggestion can be found within the four corners of any of these references of a laminating and adhesive transfer device which is a cold device which has feed rolls with integral tensioning means which permit the feed rate to be pre-set by the manufacturer.

5           The remaining claims are all either directly or independently dependent on Claims 1 and 11 and are urged allowable for the reasons set forth above.

A proposed drawing correction (marked in red) is submitted for the Examiner's approval and accompanies this Amendment.

In view of the foregoing, it is believed that the claims as presented herewith clearly  
10 define patentable subject matter over the art of record and a favorable action is solicited.

Respectfully submitted,



Dated: June 29, 1995

15           Gregory J. Nelson, Reg. No. 22, 066  
NELSON & ROEDIGER  
Attorneys for Applicant  
2623 North Seventh Street  
Phoenix, AZ 85006  
(602) 263-8782

